



Gulf of Mexico Harmful Algal Bloom Bulletin

1 February 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: January 29, 2007

Conditions Report

A harmful algal bloom has been identified in patches from Sarasota to central Collier Counties and north of the Lower Florida Keys in Monroe County. In southern Sarasota County, patchy moderate impacts are possible today and Friday followed by patchy very low impacts Saturday and Sunday. In Charlotte County, patchy high impacts are possible today and Friday followed by patchy low impacts Saturday and Sunday. In northern Lee and central Collier Counties, patchy low impacts are possible today and Friday followed by patchy very low impacts Saturday and Sunday. No impacts are expected in northern Sarasota and from southern Lee to northern Collier Counties through Sunday. On the gulfside Lower Keys, patchy moderate impacts possible in the offshore region today through through Sunday.

Analysis

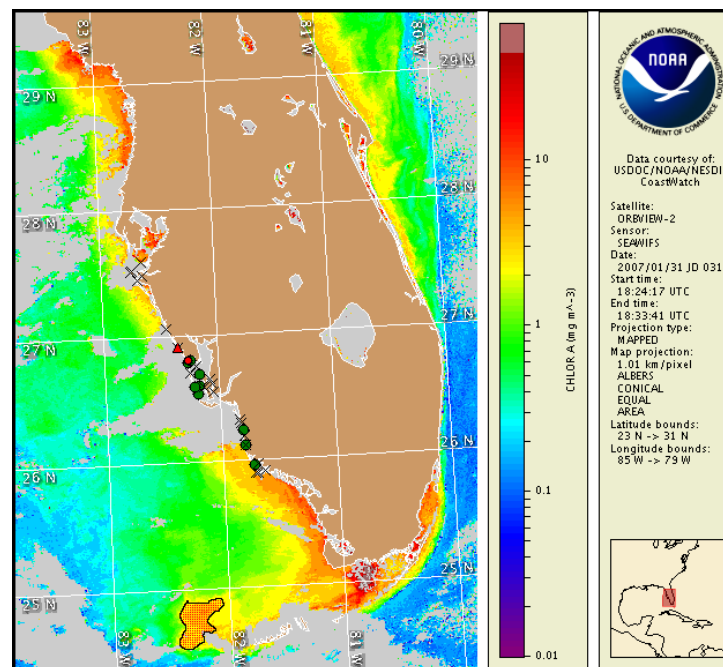
A harmful algal bloom persists from Sarasota to central Collier County and north to northwest of the Lower Florida Keys in Monroe County. Recent sampling detected *K. brevis* concentrations at background concentrations at Big Marco Pass, medium at Englewood (1/30; FWRI) and medium at Manasota Beach (1/29, SCHD). Imagery from 1/29 (not shown) shows a 25 mile wide patch of elevated chlorophyll approximately 15 miles offshore of Naples (eastern extent 26°11'44" N, 82°6'19"W; western extent 26°13'5"N, 82°31'3"W) and a smaller patch (green-blue area shown on image inset pg 2) southwest of Cape Romano (central point 25°54'33"N, 81°56'42"). At both locations, chlorophyll levels are around 3 $\mu\text{g/L}$. Recommend sampling. Imagery from 1/29 (not shown) also shows patches of elevated chlorophyll are located onshore from Venice to Englewood (up to 5 $\mu\text{g/L}$) and near Sanibel (up to 4 $\mu\text{g/L}$). Strong onshore winds today and tomorrow may increase impacts at the coast. Strong offshore winds on Saturday and Sunday will decrease impacts and possibly continue southwesterly bloom transport.

Present bloom at the gulfside Lower Keys region appears to extend up to 20 miles wide (eastern extent 24°51'32" N, 82°6'19"W; western extent 24°48'48"N, 82°25'48"W) and chlorophyll levels are around 3 $\mu\text{g/L}$. Cloudy imagery limits analysis of the coastline, where medium concentrations were located (1/19; MML). Southerly winds and prevailing currents may maintain bloom location through Friday followed by westerly transport through Sunday.

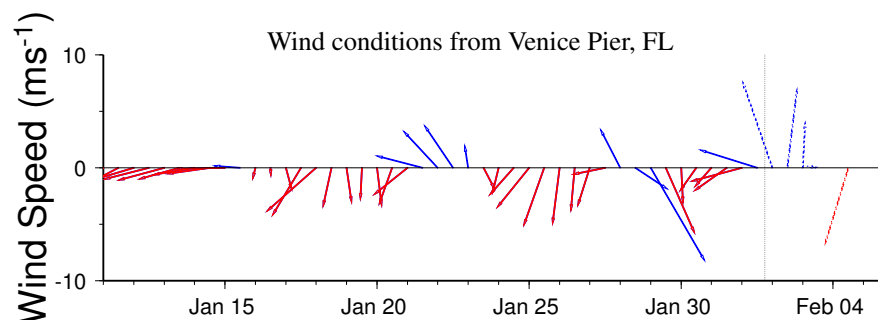
~Fenstermacher, Fisher

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



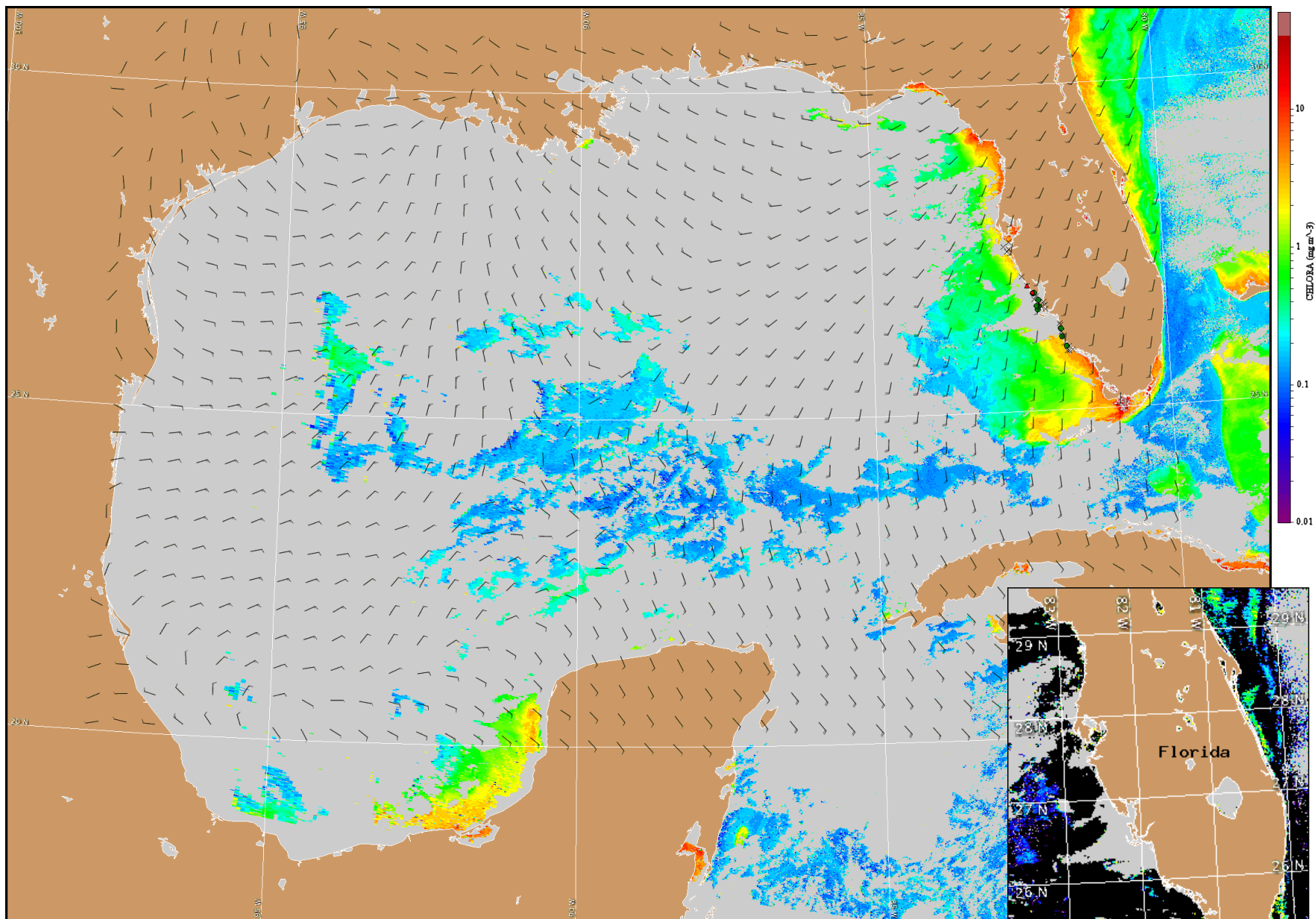
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit <http://research.myfwc.com>. Cell concentration sampling data from January 22-30 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



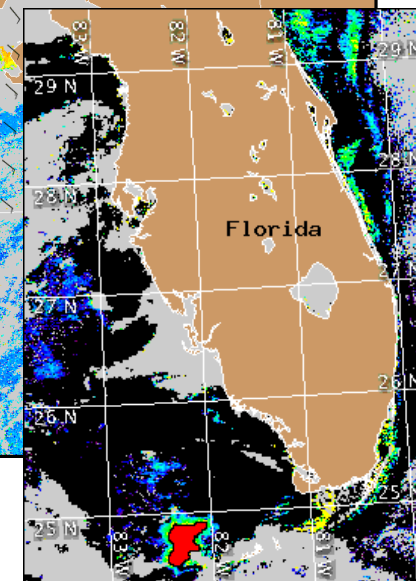
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Strong southerlies today followed by westerlies on Friday (15-25 knots; 5-13 m/s). Strong northeasterlies Friday night through Sunday (15-20 knots; 5-10 m/s)

Keys: Strong southeasterlies today followed by south to southwesterlies on Friday (15-20 knots; 5-10 m/s). North to northeasterlies on Saturday and Sunday (10-15 knots; 5-8 m/s).

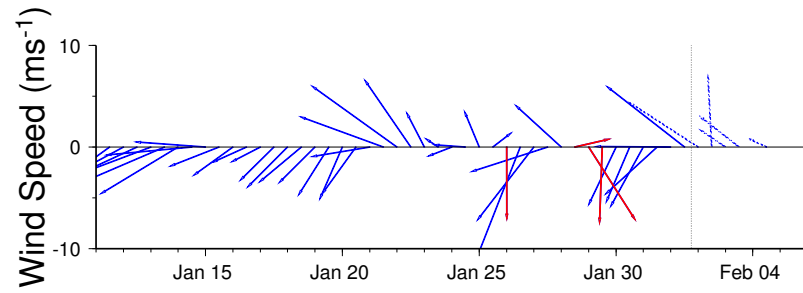


Satellite chlorophyll image and forecast winds for February 2, 2007 12Z with cell concentration sampling data from January 22-30 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Sand Key, FL



Wind conditions from Naples, FL

